

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

IOWA:012/FUS

08/951,188

List of Patents and Publications for Applicant's

Applicant

INFORMATION DISCLOSURE STATEMENT

David H. Price

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Filing Date:

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
<i>R</i>	A1	5,453,362	09-26-95	Lamarco <i>et al.</i>	435	69.1	04-12-93

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
<i>R</i>	B1	EP 0 692 488	05-07-95	Europe	C07K	14/47	
<i>R</i>	B2	WO 95/30026	11-09-95	PCT	C12Q	1/68	
<i>R</i>	B3	WO 95/32307	11-30-95	PCT	C12Q	1/68	
<i>R</i>	B4	WO 96/17084	06-06-96	PCT	C12Q	1/68	
<i>R</i>	B5	WO 96/26292	08-29-96	PCT	C12Q	1/68	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
<i>R</i>	C1	Akoulitchiev, Makela, Weinberg, and Reinberg, "Requirement for TFIIF kinase activity in transcription by RNA polymerase II," <i>Nature</i> , 377:557-560, October 12, 1995.
<i> </i>	C2	Allison, Wong, Fitzpatrick, Moyle, Ingles, "The C-Terminal Domain of the Largest Subunit of RNA Polymerase II of <i>Saccharomyces cerevisiae</i> , <i>Drosophila melanogaster</i> , and Mammals: A Conserved Structure with an Essential Function," <i>Mol. Cell. Biol.</i> , 8(1):321-329, January 1988.
<i> </i>	C3	Baskaran, Dahmus, Wang, "Tyrosine Phosphorylation of Mammalian RNA Polymerase II Carboxyl-Terminal Domain," <i>Proc. Natl. Acad. Sci. USA</i> , 90:11167-11171, December 1993.
<i>↓</i>	C4	Best, Presky, Swerlick, Burns, Chu, "Cloning of a full-length cDNA sequence encoding a <i>cdc2</i> -related protein kinase from human endothelial cells," <i>Biochem. Biophys. Res. Comm.</i> , 208(2):562-568, March 17, 1995.

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<i>JS</i>	C5	Bullrich, MacLachlan, Sang, Druck, Veronese, Allen, Chiorazzi, Koff, Heubner, Croce <i>et al.</i> , "Chromosomal mapping of members of the cdc2 family of protein kinases, cdk3, cdk6, PISSLRE, and PITALRE, and a cdk inhibitor, p27Kip1, to regions involved in human cancer," <i>Cancer Research</i> , 55(6):1199-1205, March 15, 1995.
	C6	Cadena and Dahmus, "Messenger RNA Synthesis in Mammalian Cells Is Catalyzed by the Phosphorylated Form of RNA Polymerase II*," <i>J. Biol. Chem.</i> , 262(26):12468-12474, September 15, 1987.
	C7	Chodosh, Fire, Samuels, Sharp, "5,6-Dichloro-1- β -D-Ribofuranosylbenzimidazole Inhibits Transcription Elongation by RNA Polymerase II <i>in Vitro</i> ," <i>J. Biol. Chem.</i> , 264(4):2250-2257, February 5, 1989.
	C8	Cisek and Corden, "Phosphorylation of RNA Polymerase by the Murine Homologue of the Cell-Cycle Control Protein cdc2," <i>Nature</i> , 339:679-684, June 29, 1989.
	C9	Cujec <i>et al.</i> , "The HIV Transactivator TAT Binds to the CDK-Activating Kinase and Activates the Phosphorylation of the Carboxyl-Terminal Domain of RNA Polymerase II," <i>Genes & Development</i> , 11(20):2645-2657, 1997.
	C10	Dahmus, "Phosphorylation of the C-terminal domain of RNA polymerase II," <i>Biochem. Biophys. Acta</i> , 1261:171-182, 1995.
	C11	Dahmus, "The Role of Multisite Phosphorylation in the Regulation of RNA Polymerase II Activity," <i>Progress in Nucleic Acid Research and Molecular Biology</i> , 48:143-179, 1994.
	C12	Desai, Loewenstein, Green, "Isolation of a cellular protein that binds to the human immunodeficiency virus Tat protein and can potentiate transactivation of the viral promoter," <i>Proc. Natl. Acad. Sci. USA</i> , 88:8875-8879, October 1991.
	C13	Dubois, Nguyen, Bellier and Bensaude, "Inhibitors of Transcription Such As 5,6-Dichloro-1- β -D-Ribofuranosylbenzimidazole and Isoquinoline Sulfonamide Derivatives (H-8 and H-7*) Promote Dephosphorylation of the Carboxyl-Terminal Domain of RNA Polymerase II Largest Subunit," <i>The Journal of Biological Chemistry</i> , 269(18):13331-13336, May 6, 1994.
<i>↓</i>	C14	Dvir, Peterson, Knuth, Lu, Dynan, "Ku Autoantigen Is the Regulatory Component of a Template-Associated protein Kinase That Phosphorylates RNA Polymerase II," <i>Proc. Natl. Acad. Sci. USA</i> , 89:11920-11924, December 1992.

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Peter Tunney

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	C15	Egyhazi, Ossoinak, Pigon, Holmgren, Lee, Greenleaf, "Phosphorylation Dependence of the Initiation of Productive Transcription of Balbiani Ring 2 Genes In Living Cells," <i>Chromosoma</i> , 104:422-433, 1996.
	C16	Feaver, Gileadi, Li, Kornberg, "CTD kinase associated with yeast RNA polymerase II initiation factor b," <i>Cell</i> , 67:1223-1230, December 20, 1991.
	C17	Flores, Lu, Reinberg, "Factors Involved in Specific Transcription by Mammalian RNA Polymerase II," <i>J. Biol. Chem.</i> , 267(4):2786-2793, February 5, 1992.
	C18	Fraser, Sehgal, Darnell, "Multiple Discrete Sites for Premature RNA Chain Termination Late in Adenovirus-2 Infection: Enhancement by 5,6-Dichloro-1- β -D-Ribofuranosylbenzimidazole," <i>Proc. Natl. Acad. Sci. USA</i> , 76(6):2571-2575, June 1979.
	C19	Garcia and Gaynor, "The human immunodeficiency virus type-1 long terminal repeat and its role in gene expression," [Review]. <i>Progress in Nucleic Acid Research and Molecular Biology</i> , 49:157-196, 1994.
	C20	Grana, De Luca, Sang, Fu, Claudio, Rosenblatt, Morgan, Giordano, "PITALRE, a nuclear CDC2-related protein kinase that phosphorylates the retinoblastoma protein <i>in vitro</i> ", <i>Proc. Natl. Acad. Sci. USA</i> , 91:3834-3838, April 1994.
	C21	Herrmann and Rice, "Lentivirus Tat proteins specifically associate with a cellular protein kinase, TAK, that hyperphosphorylates the carboxyl-terminal domain of the large subunit of RNA polymerase II: Candidate for a Tat cofactor," <i>J. Virol.</i> , 69(3):1612-1620, 1995.
	C22	Herrmann and Rice, "Specific interaction of the human immunodeficiency virus Tat proteins with a cellular protein kinase," <i>Virol.</i> , 197:601-608, 1993.
	C23	Herrmann, Gold, Rice, "Viral transactivators specifically target distinct cellular protein kinases that phosphorylate the RNA polymerase II C-terminal domain," <i>Nucl. Acids Res.</i> , 24(3):501-508, 1996.
	C24	Jeang, Chun, Lin, Gatignol, Glabe, Fan, " <i>In vitro</i> and <i>in vivo</i> binding of human immunodeficiency virus Type 1 protein and Sp1 transcription factor," <i>J. Virol.</i> , 67(10):6224-6233, 1993.
	C25	Jones and Peterlin, "Control of RNA initiation and elongation at the HIV-1 promoter," [Review]. <i>Annual Review of Biochemistry</i> , 63:717-743, 1994.

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<i>R</i>	C26	Kang and Dahmus, "RNA polymerases IIA and IIO have distinct roles during transcription from the TATA-less murine dihydrofolate reductase promoter," <i>J. Biol. Chem.</i> , 268(33):25033-25040, November 25, 1993.
	C27	Kephart, Marshall, Price, "Stability of <i>Drosophila</i> RNA polymerase II elongation complexes <i>in vitro</i> ," <i>Mol. Cell. Biol.</i> , 12(5):2067-2077, May 1992.
	C28	Kim and Dahmus, "The Major Late Promoter of Adenovirus-2 Is Accurately Transcribed by RNA Polymerase IIO, IIA, and IIB*," <i>J. Biol. Chem.</i> , 264(6):3169-3176, February 25, 1989.
	C29	Koleske and Young, "The RNA Polymerase II Holoenzyme and Its Implications for Gene Regulation," <i>Trends Biochem. Sci.</i> , 20:113-116, March 1995.
	C30	Laub, Jakobovits, Aloni, "5,6-Dichloro-1-β-D-Ribofuranosylbenzimidazole Enhances Premature Termination of Late Transcription of Simian Virus 40 DNA," <i>Proc. Natl. Acad. Sci. USA</i> , 77(6):3297-3301, June 1980.
	C31	Lee and Greenleaf, "A Protein Kinase That Phosphorylates the C-Terminal Repeat Domain of the Largest Subunit of RNA Polymerase II," <i>Proc. Natl. Acad. Sci. USA</i> , 86:3624-3628, May 1989.
	C32	Li and Kornberg, "Interplay of Positive and Negative Effectors in Function of the C-Terminal Repeat Domain of RNA Polymerase II," <i>Proc. Natl. Acad. Sci. USA</i> , 91:2362-2366, March 1994.
	C33	Liao, Zhang, Jeffery, Koleske, Thompson, Chao, Viljoen, Van Vuuren, Young, "A Kinase-Cyclin Pair in the RNA Polymerase II Holoenzyme," <i>Nature</i> , 374:193-196, March 1995.
	C34	Lu, Zawel, Fisher, Egly, Reinberg, "Human general transcription factor IIH phosphorylates the C-terminal domain of RNA polymerase II," <i>Nature</i> , 358:641-645, August 20, 1992.
	C35	Mancebo <i>et al.</i> , "P-TEFb Kinase Is Required For HIV Tat Transcriptional Activation <i>in vivo</i> and <i>in vitro</i> ," <i>Genes & Development</i> , 11(20):2633-2644, 1997.
	C36	Marciniak and Sharp, "HIV-1 Tat protein promotes formation of more-processive elongation complexes," <i>EMBO J.</i> , 10(13):4189-4196, 1991.
↓	C37	Marshall and Price, "Control of formation of two distinct classes of RNA polymerase II elongation complexes," <i>Mol. Cell. Biol.</i> , 12(5):2078-2090, May 1992.

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Peter Jung

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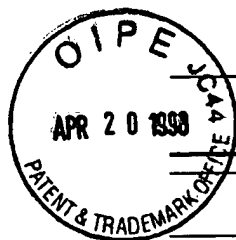
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	C38	Marshall and Price, "Purification of P-TEFb, a transcription factor required for the transition into productive elongation," <i>J. Biol. Chem.</i> , 270(21):12335-12338, May 1995.
	C39	Marshall, Peng, Xie, Price, "Control of RNA polymerase II elongation potential by a novel carboxyl-terminal domain kinase," <i>J. Biol. Chem.</i> , 271(43):27176-27183, October 1996.
	C40	Meulia, Krumm, Groudine, "Distinct properties of c-myc transcriptional elongation are revealed in <i>Xenopus</i> oocytes and mammalian cells and by template titration, 5,6-dichloro-1-b-D-ribofuranosylbenzimidazole (DRB), and promoter mutagenesis," <i>Mol. Cell. Biol.</i> , 13(9):5647-5658, September 1993.
	C41	Nelbock, Dillon, Perkins, Rosen, "A cDNA for a protein that interacts with the human immunodeficiency virus tat transactivator," <i>Science</i> , 248:1650-1653, June 1990.
	C42	Nonet, Sweetser, Young, "Functional Redundancy and Structural Polymorphism in the Large Subunit of RNA Polymerase II," <i>Cell</i> , 50:909-915, September 1987.
	C43	Payne and Dahmus, "Partial purification and characterization of two distinct protein kinases that differentially phosphorylate the carboxyl-terminal domain of RNA polymerase subunit IIa," <i>J. Biol. Chem.</i> , 268(1):80-87, January 1993.
	C44	Peterson, Dvir, Anderson, Dynan, "DNA binding provides a signal for phosphorylation of the RNA polymerase II heptapeptide repeats," <i>Genes Dev.</i> , 6:426-438, 1992.
	C45	Price, Sluder, Greenleaf, "Fractionation of transcription factors for RNA polymerase II from <i>Drosophila</i> K _c cell nuclear extracts," <i>J. Biol. Chem.</i> , 262(7):3244-3255, March 1987.
	C46	Rasmussen and Lis, "Short Transcripts of the Ternary Complex Provide Insight Into RNA Polymerase II Elongation Pausing," <i>J. Mol. Biol.</i> , 252:522-535, 1995.
	C47	Roberts and Bentley, "Distinct Modes of Transcription Read Through or Terminate at the c-myc Attenuator," <i>EMBO J.</i> , 11(3):1085-1093, 1992.
	C48	Sehgal, Darnell, Tamm, "The Inhibition by DRB (5,6-Dichloro-1-β-D-Ribofuranosylbenzimidazole) of hnRNA and mRNA Production in HeLa Cells," <i>Cell</i> , 9:473-480, November 1976.
	C49	Serizawa, Conaway, Conaway, "A carboxyl-terminal-domain kinase associated with RNA polymerase II transcription factor d from rat liver," <i>Proc. Natl. Acad. Sci. USA</i> , 89:7476-7480, August 1992.

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<i>72</i>	C50	Shibuya, Irie, Ninomiya-Tsuji, Goebel, Taniguchi, Matsumoto, "New human gene encoding a positive modulator of HIV Tat-mediated transactivation," <i>Nature</i> , 357:700-702, June 1992.
	C51	Stone and Reinberg, "Protein Kinase From <i>Aspergillus nidulans</i> That Phosphorylate the Carboxyl-Terminal Domain of the Largest Subunit of RNA Polymerase II*," <i>J. Biol. Chem.</i> , 267(6):6353-6360, 1992.
	C52	Tamm and Kikuchi, "Early Termination of Heterogeneous Nuclear RNA Transcripts in Mammalian Cells: Accentuation by 5,6-Dichloro-1-β-D-Ribofuranosylbenzimidazole," <i>Proc. Natl. Acad. Sci. USA</i> , 76(11):5750-5754, November 1979.
	C53	Tamm, Kikuchi, Darnell, Salditt-Georgeieff, "Short Capped hnRNA Precursor Chains in HeLa Cells: Continued Synthesis in the Presence of 5,6-Dichloro-1-β-D-Ribofuranosylbenzimidazole," <i>Biochem.</i> , 19:2743-2748, 1980.
	C54	Thompson, Steinberg, Aronson, Burgess, "Inhibition of <i>in Vivo</i> and <i>in Vitro</i> Transcription by Monoclonal Antibodies Prepared Against Wheat Germ RNA Polymerase II That React With the Heptapeptide Repeat of Eukaryotic RNA Polymerase II*," <i>J. Biol. Chem.</i> , 264(19):11511-11520, July 1989.
	C55	Venetianer, Dubois, Nguyen, Bellier, Seo, Bensauade, "Phosphorylation State of the RNA Polymerase II C-Terminal Domain (CTD) in Heat-Shocked Cells Possible Involvement of the Stress-Activated Mitogen-Activated Protein (MAP) Kinases," <i>Eur. J. Biochem.</i> , 233:83-92, 1995.
	C56	Xie and Price, " <i>Drosophila</i> Factor 2, an RNA polymerase II Transcript Release Factor, Has DNA-dependent ATPase Activity," <i>J. Biol. Chem.</i> , 272(50):31902-31907, 1997
	C57	Xie and Price, "Purification of an RNA polymerase II transcript release factor from <i>Drosophila</i> ," <i>J. Biol. Chem.</i> , 271(19):11043-11046, May 1996.
	C58	Yang, Herrmann, Price, "The human immunodeficiency virus Tat proteins specifically associate with TAK <i>in vivo</i> and require the carboxyl-terminal domain of RNA polymerase II for function," <i>J. Virol.</i> , 70(7):4576-4584, July 1996.
<i>↓</i>	C59	Yankulov, Yamashita, Roy, Egly, Bentley, "The transcriptional elongation inhibitor 5,6-dichloro-1-β-D-ribofuranosylbenzimidazole inhibits transcription factor IIH-associated protein kinase," <i>J. Biol. Chem.</i> , 270(41):23922-23925, October 1995.

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	C60	Zandomeni, Zandomeni, Shugar, Weinmann, "Casein Kinase Type II Is Involved in the Inhibition by 5,6-Dichloro-1-β-D-Ribofuranosylbenzimidazole of <i>Specific RNA Polymerase II Transcription</i> ," <i>J. Biol. Chem.</i> , 261(7):3414-3419, March 1986.
	C61	Zehring, Lee, Weeks, Jokerst, and Greenleaf, "The C-Terminal Repeat Domain of RNA Polymerase II Largest Subunit Is Essential <i>in Vivo</i> But Is Not Required for Accurate Transcription Initiation <i>in Vitro</i> ," <i>Proc. Natl. Acad. Sci. USA</i> , 85:3698-3702, June 1988.
	C62	Zhou and Sharp, "Novel Mechanism and Factor for Regulation by HIV-1 Tat," <i>EMBO J.</i> , 14(2):321-328, 1995.
	C63	Zhou and Sharp, "Tat-SF1: Cofactor for stimulation of transcriptional elongation by HIV-1 Tat," <i>Science</i> , 274:605-610, October 1996.
	C64	Zhu <i>et al.</i> , "Transcription Elongation Factor P-TEFb Is Required for HIV-1 Tat Transactivation <i>in vitro</i> ," <i>Genes & Development</i> , 11(20):2622-2632, 1997.

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